Amendment to the Specification:

Please replace the paragraph on page 2, line 24 to page 3, line 10 with the following paragraph:

--A hydraulic gear shift ~~gear~~ mechanism for a bicycle having a positioning mechanism for controlling the motion of the piston of a master cylinder assembly is disclosed, wherein the master cylinder assembly is in communication with a slave cylinder for operation of a derailleur. The positioning mechanism preferably includes a pivot shaft spaced apart from the handlebar, a rotating member rotatable about the pivot shaft, a push mechanism for rotating the rotating member in a first direction and a return mechanism for rotating the rotating member in a second direction. The push mechanism preferably includes a first latch segment which engages a corresponding push pawl to rotate the rotating member. The return mechanism preferably comprises a second latch segment and a return pawl, the return pawl having a first claw and a second claw which alternately engage the second latch segment. The rotating member is preferably operatively engaged with the piston of the master cylinder, wherein the rotation of the rotating member translates to an axial motion of the piston rod. In a more preferred embodiment of the invention, an adjuster piston is threadingly engaged with the master cylinder assembly for adjusting the initial position of the slave cylinder.--

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Please replace the paragraph on page 5, lines 11-22 with the following paragraph:

-- Figures 2 and 3 depict a preferred embodiment of the positioning mechanism ~~300~~ 400 of the present invention. In a preferred embodiment, the positioning mechanism 400 includes a pivot shaft 410 fixedly attached to the bracket 110 and extending upwardly therefrom. The pivot shaft 410 is preferably press fitted perpendicularly into the bottom plane of the bracket 110, however, other known

a2

techniques for connecting the pivot shaft to the bracket can also be used. A pinion gear 420, spacer 430 and latch plate 440 are rotatably supported on the pivot shaft 410 and fixed to each other. The pinion gear 420, spacer 430 and latch plate 440 are preferably biased in a clockwise direction by spring S1.--

A1 Cont

Please replace the paragraph on page 5, line 23 to page 6, line 4 with the following paragraph:

--A rack gear 450 is preferably slidably supported in a rail 111 of the bracket 110. Lid plate 451 is positioned above the rack gear 450 and secured to the bracket 110 to slidably hold the rack gear 450 in place. The lid plate 451 is preferably secured to the bracket 110 with screws 453, however, other known fasteners can also be used. The rack gear 450 includes a plurality of gear teeth 452 which are dimensioned to engage the pinion gear 420. Through the engagement of the pinion gear with the gear teeth 452 of the rack gear 450, the rotation of the pinion gear 420 is translated to an axial movement of the rack gear 450. As best shown in Figure 3, the rack gear 450 is connected to the piston rod ~~332~~ 322 of the master cylinder assembly 300. The axial movement of the rack gear 450 results in a corresponding movement of the piston rod ~~332~~ 322 of the master cylinder assembly 300.--

A2

Please replace the paragraph on page 7, lines 19-32 with the following paragraph:

--The master cylinder assembly 300 and slave cylinder assembly 700 are in fluid communication via the fluid conduit 500. The fluid conduit 500 is preferably connected to the master cylinder assembly 300 at the connecting port 312. Because the master cylinder assembly 300 and slave cylinder assembly 700 are in fluid communication, the initial position of the slave piston may be adjusted by changing the

A3

position of the adjusting piston 330 in the adjusting chamber 314. For example, if the adjusting piston 330 is threaded further into the adjusting chamber 314, the fluid is moved through the conduit 500 toward the slave cylinder assembly 700 causing the slave piston to be pushed back. One of the advantages of the present invention is that the end point adjustment of the slave piston can be made conveniently at the handlebar.--

A3 Cont

Please replace the paragraph on page 8, lines 1-12 with the following paragraph:

--As shown in Figure 5, in a preferred embodiment of the invention, the gear shift mechanism includes a four-bar linkage type derailleur 600 having a base member 610, a shifting member 640, an outer link 620 and an inner link 630 (not shown). The base member is fixedly mountable on the bicycle frame and the shifting member 640 is connected to the base member 610 via the outer link 620 and inner link 630. The shifting member 640 is preferably biased toward the center line of the bicycle by a spring disposed inside of the four-bar linkage (not shown). A pulley cage 650, pivotably connected to the shifting member 640, rotatably supports a guide pulley 651 and a tension pulley 652.--

A4

Please replace the paragraph on page 8, line 28 to page 9, line 12, with the following:

-- Figure 3 depicts the positioning mechanism 400 of the present invention in a neutral position. In the neutral state, the operating plate 490 remains stationary because the spring S4 squeezes tab 491 formed on the operating plate 490 and tab 486 formed on the fixed plate 480, as best shown in Figure 2, from both sides. In the neutral position, the push pawl 470 rests on a ramp 484 peripherally formed on the fixed plate 480. The first claw 463 of te return pawl 460 is engaged with positioning latch

A5

teeth ~~42~~ 442 formed on the latch plate 440. The rack gear 450 is biased in the direction away from the master cylinder assembly 300 (corresponding to the right in Figure 3) by the biasing force of the return spring of the derailleur transmitted by fluid. The pinion gear 420 is biased in a clockwise direction by spring S1 and by the force transmitted from the rack gear 450. The engagement of the first claw 463 of the return pawl 460 with the positioning latch teeth 442 maintains the position of the pinion gear 420 and prevents the pinion gear 420 from freely rotating in the clockwise direction. --

a5 Cont

Please replace the paragraph on page 9, lines 23-33 with the following paragraph:

--Figure 6a depicts the positioning mechanism 400 of the present invention in a neutral position. To push the ~~master cylinder~~ piston rod 322, the operating plate 490 is rotated in a counterclockwise or push direction. As best shown in Figure 6b, the rotation of the operating plate 490, causes the push pawl 470 to slide off of the fixed plate ramp 484. Because the push pawl 470 is biased toward the latch plate 440, the push pawl engages one of the teeth of the pushing latch 441. When the push pawl 470 has engaged one of the teeth of the pushing latch 441, rotation of the operating plate 490 translates to a rotation of the latch plate 440.--

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Please replace the paragraph on page 10, lines 1-13 with the following:

-- As best shown in Figure 6c, the rotation of the latch plate 440 driven by the push pawl 470 causes the first claw 463 of the return pawl 460 to disengage from the positioning latch teeth 442. As the latch plate 440 is further rotated, the return pawl 460 moves toward a tooth of the positioning latch teeth adjacent the previously engaged tooth. Because the latch plate 440 is fixedly attached to the pinion gear 420, the pinion

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gear 420 rotates simultaneously with the latch plate 440 in ~~he~~ the counterclockwise direction. The rotation of the pinion gear 420 drives the rack gear 450 causing the piston rod 322 to further extend into the main chamber 311, thus displacing the fluid in the master cylinder assembly 300. --

07 cont

Please replace the paragraph on page 10, lines 14-26, with the following:

-- As best shown in Figure 6d, because the return pawl 460 is biased toward the latch plate 440, the return pawl engages a tooth of the positioning latch teeth 442 adjacent the previously engaged tooth. In a preferred embodiment of the invention, an audible click is produced when the first claw 463 of the return pawl 460 engages the positioning latch teeth 442. Moreover, the rider can feel the snap of the first claw 463 engaging the positioning latch teeth 442. ~~Te~~ The audible click and the snapping motion alerts the rider that the first claw 463 of the return pawl 460 has advanced by one tooth completing one step of a multi-step shift mechanism. Upon completion of the one step shift, the operating plate 490 returns to the neutral position, as shown in Figure 6e.--

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Please replace the paragraph on page 10, line 26 to page 11, line 12, with the following:

-- In a preferred embodiment of the invention, the positioning mechanism 400 of the present invention is configured to enable the rider to shift more than one step at a time, and more preferably to shift ~~p~~ up to three steps at a time. To perform a multi-step winding operation, the bicycle rider rotates the control lever 405 further in the push direction P. The positioning mechanism 400 operates as described above in that the push pawl 470 engages the pushing latch 441 driving the pushing latch in the push direction P. The return pawl 460 disengages from the positioning latch teeth 442 and engages the

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tooth adjacent the previously engaged tooth. However, in the multi-step operation, the bicycle rider continues to rotate the control lever 405 causing the latch plate 440 to rotate further, and the return pawl 460 to continue to engage neighboring teeth 442 until the latch plate 440 ceases to rotate. In a preferred embodiment of the invention, the angle of rotation of the operating lever 405 in the push direction P is limited by the contact of abutment 494 on the operating plate 490 and protrusion 485 on the fixed plate 480. --

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